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DRAFT NEW SOURCE REVIEW PERMIT

Issued under 20.2.72 and 20.2.74 NMAC

Note to Applicant for Draft Permit Reviews: The AQB permit specialist provides this draft permit to the applicant as a courtesy to assist AQB with developing practically enforceable permit terms & conditions and correcting any technical errors. Please note that the draft permit may change following completion of the Department's internal reviews. If AQB makes additional changes, and as time allows, the applicant may be provided an opportunity for additional review before the permit is issued.

<u>Certified Mail No</u>: n/a draft permit <u>Return Receipt Requested</u>

NSR Permit No: PSD-5217<u>M1</u>
Facility Name: Zia II Gas Plant

Permittee Name: DCP Midstream, L.P.

Mailing Address: 10 Desta Drive, Suite 400 West

Midland, TX 79705

TEMPO/IDEA ID No: 32800-PRN20150001

AIRS No: 35 025 0571

Permitting Action: Revision to New PSD Permit **Source Classification:** TV Major and PSD Major

Facility Location: 32°38'34.88" N and 103°48'31.92" W

County: Lea

Air Quality Bureau Contact Kirby Olson Main AQB Phone No. (505) 476-4300

Richard L. Goodyear, PE Date

Bureau Chief Air Quality Bureau

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. This permit, NSR PSD-5217-M1, supersedes all portions of Air Quality Permit PSD-5217, issued 4-24-14, except the portion requiring compliance tests. Compliance test conditions from previous permits, if not completed, are still in effect, in addition to compliance test requirements contained in this permit This is a

B. The permitted allowable Best Available Control Technology (BACT) emission limits identified as BACT in Tables 106.A, 106.B, and 107.A were determined through a PSD BACT review and determination in accordance with NMAC 20.2.74 Permits-Prevention of Significant Deterioration. Any change or revision of these BACT limits and their corresponding control technology or operational requirements must be applied for and accompanied by a corresponding reevaluation of the original BACT determination (20.2.74.302 NMAC).

A101 Permit Duration (expiration)

A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

A102 Facility: Description

- A. The Zia II facility is a natural gas processing plant. The function of the facility is to treat and process natural gas from DCP gathering systems located throughout southeast New Mexico. The facility will utilize a cryogenic gas process and be designed to operate at a nominal rate of 200 MMscf/day and a maximum rate of 230 MMscf/day of natural gas. Processing includes the removal of water, carbon dioxide, hydrogen sulfide, extraction of natural gas liquids, and reinjection of acid gases. The description of this facility is for informational purposes only and is not enforceable.
- B. This facility is located approximately 28 miles northeast of Carlsbad, New Mexico in Lea County.
- C. This application revises existing PSD permit No. PSD5217 for a "new" facility as defined at 20.2.74.7.U NMAC. In summary, the revisions include changes to some stack parameters; increases and decreases to the capacity of some units, allowable mass emission limits, and BACT limits; adding new equipment; and removing equipment from the permit that was never constructed.

Changes to the facility include:

- Clarify that 230 MMscf/d is the maximum, not nominal, capacity of the facility and add a permit limit on inlet capacity
- For Flare FL1, increase inlet gas flare processing from 200 MMscf/d to 230 MMscf/d; increase pilot and purge gas flow rate; increase allowable pph/BACT emission limits for all pollutants; increase tpy emission limits for all pollutants
- For Flare FL2, decrease acid gas flare pph/BACT limits and increase tpy emission limits for all pollutants
- Add VOC and CO2e venting emissions (units SSM (CB) and SSM (PV))

during routine or predictable startup, shutdown, and/or maintenance of the facility

- Add FL3 pilot and purge gas emission limits for existing Lusk Flare to be used for emergencies only at Zia II Gas Plant
- Reduce acid gas processing from 16 MMscf/d to 8 MMscf/d; add capacity limit to the permit; and remove requirement to use 2 Acid Gas Injection (AGI) wells to control amine unit emissions due to the decrease in acid gas processing
- Add a new standby emergency generator (GEN-1) and BACT requirements and limit engine to 500 operating hrs/yr
- Add a new Wet Surface Air Cooler (CT-1) and BACT requirements
- Increase capacity of Regeneration Gas Heater Unit H3 from 8 to 10 MMBtu/hr; increase allowable mass emission limits; no change to BACT limits or requirements
- Increase capacity of TEG regenerator Heater H6 from 3 to 3.5 MMBtu/hr; increase tpy emission limits; no change to BACT limits
- Decrease Hot Oil Heater Capacities, Units H4 and H5, from 114 MMBtu/hr to 99 MMBtu/hr; decrease allowable mass emission limits; no change to BACT limits
- Change BACT control requirement for NOx for Heaters H4 and H5 from Ultra Low NOx burners and GCP to Low NOx burners and GCP
- Remove never constructed Stabilizer Heater Unit H2 and Compressor Engines C11-E, C12-E, and C13-E from the permit
- Increase Fugitive allowable tpy VOC emission limits to 31.5 tpy
- Decrease emission limits for the haul road and add paving requirement to
- Add make, model, serial numbers, and construction dates for some units
- D. Table 102.A and Table 102.B show the total potential emissions from this facility for information only, not an enforceable condition. This table does not include sources or activities without emissions or not regulated pursuant to the Act.

Table 102.A: Total Potential Pollutant Emissions from Entire Facility

Pollutant	Emissions (tons per year)*
Nitrogen Oxides (NO _x)	316.3 274.7
Carbon Monoxide (CO)	127.6 117.9
Volatile Organic Compounds (VOC)	158.4 155.5
Sulfur Dioxide (SO ₂)	100.8 114.8
Total Suspended Particulates (TSP)	<u>20.324.9</u>
Particulate Matter less than 10 microns (PM ₁₀)	<u>20.1</u> 23.8
Particulate Matter less than 2.5 microns (PM _{2.5})	<u>20.1</u> 23.3
Hydrogen Sulfide (H ₂ S)	1.4 <u>1.6</u>
Greenhouse Gas (GHG)	378,991 290,170

 ^{*} Totals include emissions from Fugitives and SSM.

Table 102.B: Total Potential HAPs* that exceed 1.0 ton per year

Pollutant	Emissions (tons per year)				
Acetaldehyde; (Ethyl aldehyde)	14.1 12.2				
Acrolein	8.1 7.0				
Benzene	2.1 1.9				
Ethylbenzene	2.1 <u>1.9</u> 2.6 <u>3</u>				
Formaldehyde	25.5 12.3				
Hexane (n-)	4.8 <u>5</u>				
Methanol; (Methyl alcohol)	<u>4.4</u> 5.1				
Styrene	2. <u>52</u>				
Toluene; (Methyl benzene)	2.3 <u>1</u>				
Trimethylpentane (2,2,4-)	3.83				
Xylenes (total); (Xylol)	2.2 <u>0</u>				
Total HAPs**	77.6 58.5				

^{*} HAP emissions are already included in the VOC emission total.

A103 Facility: Applicable Regulations

A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

Table 103.A: Applicable Requirements

Annlicable Dequirements	Federally	Unit		
Applicable Requirements	Enforceable	No.		
20.2.1 NMAC General Provisions	X	Entire facility		
20.2.3 NMAC Ambient Air Quality Standards	X	Entire facility		
20.2.7 NMAC Excess Emissions	X	Entire facility		
20.2.35 NMAC Natural Gas Processing Plant –		Entire facility		
Sulfur				
20.2.37 NMAC Petroleum Processing Facilities		Entire facility		
20.2.70 NMAC Operating Permits	X	Entire facility		
20.2.71 NMAC Operating Permit Emission Fees	X	Entire facility		
20.2.72 NMAC Construction Permit	X	Entire facility		
20.2.73 NMAC Notice of Intent and Emissions	X	Entire facility		
Inventory Requirements	Λ			
20.2.74 NMAC Permits – Prevention of Significant	X	Entire facility		
Deterioration (PSD)	Λ			
20.2.75 NMAC Construction Permit Fees	X	Entire facility		
20.2.77 NMAC New Source Performance	X	See sources subject to 40 CFR		
20.2.77 INVIAC New Source Performance	Λ	60		
20.2.80 NMAC Stack Heights	X	Entire facility		

^{**} The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 ton per year are listed here.

Applicable Requirements	Federally Enforceable	Unit No.
20.2.82 NMAC MACT Standards for Source Categories of HAPS	X	See sources subject to 40 CFR 63
40 CFR 50 National Ambient Air Quality Standards	X	Entire facility
40 CFR 60, Subpart A, General Provisions	X	See sources subject to 40 CFR 60
40 CFR 60.18	<u>X</u>	FL1, FL2, and FL3
40 CFR 60, Subpart Dc	X	H1, H3, H4 and H5
40 CFR 60, Subpart IIII	<u>X</u>	GEN-1
40 CFR 60, Subpart JJJJ	X	C1-E to C1 <u>30</u> -E
40 CFR 60, Subpart OOOO	X	C1-C to C130-C, and equipment leaks (FUG)
40 CFR 63, Subpart A, General Provisions	X	See sources subject to 40 CFR 63
40 CFR 63, Subpart HH	X	Dehy
40 CFR 63, Subpart ZZZZ	X	C1-E to C130-E, GEN-1
40 CFR 63, Subpart DDDDD	X	H1, H3, H4, H5, and to H6
40 CFR 64	X	Subject Units to be determined in Title V
40 CFR 68, Chemical Accident Prevention	X	Entire facility

A104 Facility: Regulated Sources

B. Table 104 lists the emission units authorized for this facility. Emission units and/or equipment without emissions or not regulated pursuant to the Act are not included.

Table 104: Regulated Sources List

Unit No.	Source	Make	Serial No.	Permitted	Construction
	Description	Model		Capacity	Dates
Amine	Amine sweetening	TBD	TBD	8 MMscf/d	TBD [±]
	Unit				
C1-E	4SLB RICE	Caterpillar G3616	BLB00911	4735 hp	March 2015
C2-E	4SLB RICE	Caterpillar G3616	BLB00912	4735 hp	March 2015
С3-Е	4SLB RICE	Caterpillar G3616	BLB00915	4735 hp	March 2015
C4-E	4SLB RICE	Caterpillar G3616	BLB00918	4735 hp	March 2015
С5-Е	4SLB RICE	Caterpillar G3616	BLB00917	4735 hp	March 2015
С6-Е	4SLB RICE	Caterpillar G3616	BLB00913	4735 hp	March 2015
С7-Е	4SLB RICE	Caterpillar G3616	BLB00916	4735 hp	March 2015
С8-Е	4SLB RICE	Caterpillar G3616	BLB00914	4735 hp	March 2015
C9-E	4SLB RICE	Caterpillar G3608LE	BEN1006	2370 hp	March 2015
C10-E	4SLB RICE	Caterpillar G3608LE	BEN01001	2370 hp	March 2015
C11-E	4SLB-RICE	Caterpillar G3608LE	TBD	2370 hp	TBD

Commented [CH1]: The permit requires at a minimum, the month and year of construction or reconstruction. And the reason that these are still listed as 'to be determined' or TBD.

Unit No.	Description Model		Serial No.	Permitted Capacity	Construction Dates		
C12-E	4SLB RICE	Caterpillar G3608LE	TBD	2370 hp	TBD		
C13-E	4SLB-RICE	Caterpillar G3608LE	TBD	2370 hp	TBD		
C1-C to C15-C	Compressors (reciprocating)	Ariel	Various	N/A	March-2015		
Dehy	TEG Dehydrator Still Vent/Flash Tank	Enerflex	E001227	230 MMSCF/d	TBD		
FL1	Inlet Gas Flare	Zeeco	FL- 5100/24093	230 MMscf/d	TBD		
FL2	Acid Gas Flare	Zeeco	FL- 5200/24093	8 MMscf/d	TBD		
FL3	Lusk Emergency Flare	Flare King	FL-201583	13 MMscf/d	TBD		
FUG	Facility-wide Fugitives	NA	NA	NA	TBD		
H1	Trim Reboiler Heater	Heatec HCI-10010- 40-D	HI-13-170	26 MMBTU/hr	March-2015		
H2	Stabilizer Heater	TBD	TBD	7 MMBTU/hr	TBD		
НЗ	Regeneration Gas	Heatec HCI-5010-40-	HI-13-165	810 MMBTU/hr	March-2015		
	Heater	G					
H4	Hot Oil Heater	OPF	J121104	114-99 MMBTU/hr	TBD		
H5	Hot Oil Heater	OPF	J131125	99 MMBTU/hr 114 MMBTU/hr	TBD		
Н6	TEG Regeneration Heater	Maxon XPO-3	942556	3 <u>.5</u> MMBTU/hr	TBD		
HAUL	UnpPaved Haul Roads	NA	NA	NA	TBD		
L1	Truck Load-out	TBD	TBD	38,325 Mgal/y	TBD		
TK- <u>2100</u> 4	Condensate Tank	Tank and Vessel Builders	201429	1000 bbl / 38,325 Mgal/y ¹	Feb-2015		
TK- <u>2200</u> 2	Condensate Tank	Tank and Vessel Builders	201430	1000 bbl / 38,325 Mgal/y ¹	Feb-2015		
TK-C	Produced Water Tank	Not provided TBD	TBD	100 bbl / 766,500 gal/y ³	TBD		
TK- 6100G	Produced Water Tank	Palmer	ST1046541	300 bbl / 766,500 gal/y ²	Feb-2015		
TK- 6150H	Produced Water Tank	Palmer	ST1406066	300 bbl / 766,500 gal/y ²	Feb-2015		
VCD1	Vapor Combustion Device	Zeeco	24895	3.6 MMBTU/hr	TBD		

Commented [CH2]: Compressors C11-C to C15-C will be powered with commercial electric power and so 3 RICE were removed from the permit.

Commented [CH3]: The existing flare used at the Lusk inlet compressor station, which is replaced by the Zia II inlet compression and must be shut down, is needed for the Zia II facility inlet compressor. Gas is sent to the flare only during emergencies and so the flare pilot and purge gas is used to establish the allowable emission limits in the Zia II permit.

Commented [CH4]: Heater H2 was removed from the permit.

Commented [CH5]: The capacity of H3 decreased from 10 to 8 MMBtu/hr. This lower mass emission limits but does not change BACT limits.

Commented [CH6]: Heaters H4 and H5 decreased capacity from 114 to 99 MMBtu/hr. This lowers the mass emission limits but does not decrease BACT limits.

Commented [CH7]: H6 capacity increased from 3 to 3.5 MMBtu/hr. This increased mass emission limits but did not increase the BACT limits.

Unit No.	Source Description	Make Model	Serial No.	Permitted Capacity	Construction Dates
GEN-1	Standby Diesel Generator	Cummins DSFAC	TBD	70 hp	TBD
CT-1	Wet Surface Air Cooler	Niagara Blower Company A4407SL	14-23717	240 gpm	TBD
SSM (CB)	Compressor Blowdown	N/A	N/A	59,800 scf/yr	TBD
SSM (PV)	Plant Venting	N/A	N/A	14,100,000 scf/yr	TBD

- Total facility condensate throughput of 38,325,000 gal/y for TK4-2100 and TK-22002 combined, and is equal to Unit L1 (truck load-out).
- 2. Total facility produced water output (766,500 gal/y; TK-C, TK-G6100, and TK-H6150 combined).
 - C. The Permittee shall report to the Permit Section Manager all the to be determined (TBD) values in Table 104 within 15 days after the initial startup date of each unit or within 15 days of issuance of Permit PSD-5217-M1, whichever is later. At a minimum, the month and year of each construction date shall be reported for each unit based on the "begin actual construction date" as defined at 20.2.74.7.J NMAC. (new condition required to determine future PSD applicability)
 - D. The permittee increased the process rates and/or allowable emission limits in PSD5217-M1 for the units FL1, FL2, and FUG. Within 15 days of the issuance of PSD5217-M1, the permittee shall report to the Permit Section Manager the Month and Year that the process rates and/or the potential emission rates increased to the current permitted limits. If not increase has yet occurred for a unit, the report shall state that. (new condition required to determine future PSD applicability)
 - E. For any future like-kind replacements of internal combustion engines (ICE) (C1-E to C10-E, GEN-1), before making the replacement, the permittee shall determine and document Prevention of Significant Deterioration (PSD) applicability, including defining the project (20.2.74.200 NMAC); shall determine and record the low level regulatory citation any applicable emissions and/or operational standards from 40 CFR 60 and/or 40 CFR 63. These records shall be included with the application requesting the permit modification and shall be maintained according to Section B111 and at least as long as the applicable PSD contemporaneous period. (replaces footnote 1 to Table 106.A regarding TBD units)
 - F. For each ICE (C1-E to C10-E, GEN-1) and compressor (C1-C to C15-C), the permittee shall maintain a log with the unit number; the most current construction, modification, or reconstruction date; and the serial number. (new condition)

Commented [CH9]: Units GEN-1, CT-1, SSM (CB), and SSM (PV) are new.

Commented [CH10]: The type of application depends on the project and resulting PSD determination, the application could be an administrative permit revision, a significant permit revision with 1st step and/or 2nd step PSD determination (e.g. netting), or a PSD major modification.

Commented [CH11]: Requesting these records since this equipment table summarizes the compressors instead of listing each serial number. Accurate records are also needed since this affects NSPS 0000, NSPS JJJJ/IIII, and MACT ZZZZ applicability.

A105 Facility: Controls including BACT

A. Table 105 lists all the pollution control requirements for this facility. The installation, configuration, and operation of the controls listed in Table 105 are enforceable requirements.

Table 105: Pollutant Controls:

Control Equipment Unit No.	Control Description	Pollutant being controlled	*Control for Unit Number(s) in Table 104	Required for BACT
AGI 1 and AGI2 ¹	Still Vent to Acid gas injection well(s) 100% Capture	VOC, CO2e, and H2S	Amine	Yes – CO2e and VOC No – H2S
Amine flash tank	Flash Tank emissions recycle to inlet 100% Capture	VOC, CO2e, and H2S	Amine	Yes – CO2e and VOC No – H2S
FL2	Still Vent to Acid gas flare; 100% Capture, 98% DRE ²	VOC, CO2e, and H2S	Amine	Yes – CO2e and VOC No – H2S
C1-E to C1 <u>30</u> - E	Lean Burn Technology, AFR ³ Controller, GCP ⁴	NOx	C1-E to C1 <u>30</u> -E	Yes
C1-E to C1 3 0- E	Oxidation catalyst and GCP	CO, VOC, Formaldehyde	C1-E to C1 3 0-E	Yes – CO and VOC No - Formaldehyde
C1-E to C1 3 0- E	Pipeline quality natural gas ⁵	Sox	C1-E to C1 <u>30</u> -E	Yes
C1-E to C1 <u>30</u> - E	GCP and pipeline quality natural gas	PM10, PM2.5, CO2e	C1-E to C1 <u>30</u> -E	Yes
FL1	Facility-wide to combust venting and blowdown for maintenance; FUG (portion) 100% Capture, 98% DRE	VOC, CO2e, and H2S	Compressor and piping blowdown/venting; FUG (portion)	Yes – CO2e and VOC No – H2S
Dehy and VCD1	Flash Tank emissions route to low pressure inlet, still vent to BTEX condenser, BTEX condenser to VCD1 100% Capture, 98% DRE	VOC, HAPs, and CO2e	Dehy	Yes – VOC and CO2e No - HAPs
FL1 and FL2	GCP, pipeline quality natural gas for pilot, limitations on flaring events	NOx, CO, PM10, PM2.5, SO2	FL1 and FL2	Yes
FL1 and FL2	GCP, limitations on flaring events, 40 CFR 60.18	VOC and CO2e	FL1 and FL2	Yes

Commented [KO12]:

Commence [NOI2]:
According to the application, the AGI capacity for each well is 8 mmscf/d. DCP originally planned on sending 16 mmscf/d and so had permitted 2 AGI wells. We have added a limit on sour gas processing to ensure that the AGI controls can sufficiently handle the sour gas processing since the requirement to control amine unit emissions with 2 AGI wells is no longer required.

Control Equipment Unit No.	Control Description	Pollutant being controlled	*Control for Unit Number(s) in Table 104	Required for BACT
FL3	GCP, pipeline quality natural gas for pilot, 40 CFR 60.18	NOx, CO, PM10, PM2.5, SO2 VOC and CO2e	FL3	Yes
SSM (CB) & SSM (PV)	Reduce number and duration of venting due to routine or predictable startup, shutdown, and maintenance per 20.2.7 NMAC plan	VOC and H2S	SSM (CB) & SSM (PV)	Yes - VOC No - H2S
FUG	LDAR (leak detection and repair)	VOC and CO2e	FUG	Yes
H4 and H5	Ultra-low NOx burners and GCP	NOx	H4 and H5	Yes
H1, H2, H3, and through H6	Low NOx burners and GCP	NOx	H1, H2, H3, through and H6	Yes
H1, H3 through H6 H1 H6	GCP	CO, VOC	H1, H3 through H6 H1 to H6	Yes
H1, H3 through	Pipeline quality natural gas	SOx	H1, H3 through	Yes
H1, H3 through	GCP and pipeline quality natural gas	PM10, PM2.5, CO2e	H1, H3 through H6 H1 to H6	Yes
HAUL	Paved surface25 mph speed limit with speed humps ⁶	TSP, PM10, PM2.5	HAUL	Yes – PM10, PM2.5 No - TSP
L1 and VCD1	Submerged loading and vented to VCD1 100% Capture, 98% DRE	VOC and CO2e	L1	Yes
TK- <u>12100</u> , TK- <u>22200</u> , TK-C, TK- <u>G6100</u> , TK- <u>H6150</u> , and VCD1	Fixed roof tank with blanket gas; submerged fill pipe; vented to VCD1 100% Capture, 98% DRE	VOC and CO2e	TK-1, TK-2, TK-C, TK-G, TK-H	Yes
H2	Condensate flash emissions stabilized with heater H2 and flash emissions routed to inlet 100% Capture	VOC and CO2e	TK 1 and TK 2	Yes
Fuel	GCP and 40 CFR 60.482- 10a(c)	NOx, CO, and VOC	VCD1	Yes
Fuel	GCP and pipeline quality natural gas	CO2e	VCD1	Yes
<u>CT-1</u>	High efficiency drift eliminator with 0.0005% drift rate	PM10, and PM2.5	<u>CT-1</u>	Yes

Control Equipm Unit No	-	Pollutant being controlled	*Control for Unit Number(s) in Table 104	Required for BACT
<u>Fuel</u>	<u>Ultra low sulfur diesel fuel</u> of 15 ppmv	<u>SO2</u>	GEN-1	Yes
GEN-1	GCP, NOx, CO, PM – Meet 40 CFR 60, Subpart IIII emission standards CO2e – Limit to 500 hrs/yr	CO, VOC, PM10, and PM2.5 (for CO2e GCP only)	<u>GEN-1</u>	Yes
GEN-1	GCP, Integral Turbocharged & Charge Air Cooled; NOx, CO, PM – Meet 40 CFR 60, Subpart IIII emission standards CO2e – Limit to 500 hrs/yr	<u>NOx</u>	GEN-1	Yes

- * Unit numbers are in alphabetical order.
- 1. AGI means acid gas injection well.
- 2. DRE means destruction rate efficiency.
- 3. AFR means integrated air fuel ratio controller.
- 4. GCP means good combustion practices.
- 5. Pipeline quality natural gas = natural gas with no more than 5 gr total Sulfur/100 dscf and after processing through the inlet separator, amine unit, and TEG dehydrator to remove impurities.

A106 Facility: Allowable Emissions

A. The following Section lists the emission units and their allowable emission limits, not including emission limits in Section A107. (40 CFR 50; 40 CFR 60, Subparts A, Dc, IIII, JJJJ, and OOOO; 40 CFR 63, Subparts A, DDDDD, and ZZZZ; 20.2.37 NMAC; 20.2.72.210.A and B.1 NMAC; and 20.2.74 NMAC).

Table 106.A: Allowable PPH and TPY Emissions. Refer to Tables 106.B and 107.A for additional unit specific BACT Emission Limits										ınit				
Unit No.	NO _x ¹ pph	NO _x ¹ tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy	TSP pph	TSP tpy	PM ₁₀ pph	PM ₁₀ tpy	PM _{2.5} pph	PM _{2.5} tpy
Amine ³	_2	-	-	-	0.0	0.0	-	-	-	-	-	-	1	-
C1-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
С2-Е	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
С3-Е	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C4-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4

Unit	NO_x^1	NO_x^1	CO	CO	VOC	VOC	SO ₂	SO_2	TSP	TSP	PM_{10}	PM_{10}	$PM_{2.5}$	PM _{2.5}
No.	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
C5-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
С6-Е	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
С7-Е	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C8-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
С9-Е	2.6	11.4	0.9	4.0 <u>6</u>	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
C10-E	2.6	11.4	0.9	4. <u>6</u> 0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
CH-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
C12-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
C13-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
Dehy ³	-	-	-	-	0.0	0.0	-	-	-	-	-	-	-	-
FUG	-	-	-	-	*4	28.2 <u>3</u> 1.5	-	-	-	-	-	-	-	-
H1	1.3	5.6	2.1	9.4	0.1	0.6	0.4	1.6	0.2	0.9	0.2	0.9	0.2	0.9
H2	0.3	1.5	0.6	2.5	0.04	0.2	0.1	0.4	0.05	0.2	0.05	0.2	0.05	0.2
НЗ	0.4 <u>5</u>	2.1 1. 7	0.7 <u>9</u>	3.6 2.	0.0 <u>5</u> 4	0.2	0.1	0. <u>6</u> 5	0.0 <u>8</u> 6	0.3	0.0 <u>8</u> 6	0.3	0.086	0.3
H4	5.96. 8	30.0 <u>2</u> 6.0	4. <u>1</u> 7	17.8 ₂ 0.5	0.6	2.37	1.46	<u>6</u> 7.2	0.79	3.27	0.79	3.27	0.79	3. <u>2</u> 7
H5	5.96 . 8	26.03 0.0	4.14 . 7	17.82 0.5	0.60. 6	2.3 2. 7	1.41. 6	6.27 .	<u>0.7</u> 0.	3.23 . 7	<u>0.7</u> 0.	3.23 . 7	<u>0.7</u> 0.	3.2 ₃ .
Н6	0.2	0.68	0.3	1. <u>3</u> 4	0.02	0.0 <u>8</u> 7	0.0 <u>5</u> 4	0.2	0.0 <u>3</u> 2	0.1	0.032	0.1	0.023	0.1
HAUL	-	-	-	-	-	-	-	-	0.4	0.3 1.	0.081	0. <u>05</u> 5	0.024	0.0 <u>1</u> 4
L1 ³	-	-	-	-	0.0	0.0	-	-	-	-	-	-	-	-
VCD1	0.2	1.1	0.2	0.9	1.8	7.7	-	-	-	-	-	-	-	-
FL3 ⁴	0.2	0.7	0.8	3.7	0.01	0.05	=	=	Ξ	=	Ξ	Ξ	Ξ	Ξ
<u>CT-1</u>	=	=	=	Ξ.	=	=	Ξ.	Ξ.	<u>≤⁵<0.0</u> <u>02</u>	<0.008	<u><5.0E-</u>	<0.002	<u><5.2E-</u> 7	<u><2.3E-</u>
GEN-1	<u>-0.5</u>	<u>-0.1</u>	<u>-0.6</u>	<u>-0.1</u>	-0.023	<u>-0.007</u>	-1.3E-	<u>-3.2E-</u> <u>7</u>	<0.004	<u><0.000</u> 9	<u>5</u> <0.004	<0.000	<u>7</u> <0.004	<u>6</u> <0.000

Table 106.A: Allowable PPH and TPY Emissions. Refer to Tables 106.B and 107.A for additional unit specific BACT Emission Limits

Unit	NO_x^1	NO_x^1	CO	CO
No.	pph	tpy	pph	tp
TK_	_	_	_	_

Unit	NO _x ¹	NO _x ¹	co	CO	VOC	VOC	SO ₂	SO ₂	TSP	TSP	PM ₁₀	PM ₁₀	PM _{2.5}	PM _{2.5}
No.	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
TK-	-	-	-	-	*4 <u>6</u>	0.03 0	-	-	-	-	-	-	-	-
2100,						<u>.0</u>								
TK-														
2200														
TK-	-	-	-	-	*4	0.3 0.	-	-	-	-	-	-	-	-
6100,						0								
TK-														
6150														

- Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO2.
 - "-" indicates the application represented emissions of this pollutant are not expected. Amine unit, Dehydrator, L1, and Tank emissions are controlled 100%.
- Pilot and purge emissions only
- "<"indicates the application represented uncontrolled emissions are less than 1.0 pph or 1.0 tpy for this pollutant.

 Allowable limits are not imposed on this level of emissions, except for flares and pollutants with controls.
- * indicates that pph emission limits are not appropriate for this unit.

Note: For Title V facilities, the Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107.

Table 1	Table 106.B: BACT Emission Limits In Addition to those in Table 107.A											
Unit No.	NO _x ¹ g/bhp-hr	CO g/bhp-hr	VOC g/bhp-hr	SO_2^2	PM ₁₀ lb/MMBtu	PM _{2.5} lb/MMBtu	CO ₂ e tpy					
C1-E	0.5	0.05	0.2	\mathbf{P}^2	0.00999	0.00999	16,029					
С2-Е	0.5	0.05	0.2	P	0.00999	0.00999	16,029					
С3-Е	0.5	0.05	0.2	P	0.00999	0.00999	16,029					
С4-Е	0.5	0.05	0.2	P	0.00999	0.00999	16,029					
С5-Е	0.5	0.05	0.2	P	0.00999	0.00999	16,029					
С6-Е	0.5	0.05	0.2	P	0.00999	0.00999	16,029					
С7-Е	0.5	0.05	0.2	P	0.00999	0.00999	16,029					
С8-Е	0.5	0.05	0.2	P	0.00999	0.00999	16,029					
С9-Е	0.5	0.175	0.3	P	0.00999	0.00999	10,101					
C10-E	0.5	0.175	0.3	P	0.00999	0.00999	10,101					
C11-E	0.5	0.175	0.3	P	0.00999	0.00999	10,101					
C12-E	0.5	0.175	0.3	₽	0.00999	0.00999	10,101					

C13-E	0.5	0.175	0.3	<u>Р</u> 0.00999		0.00999	10,101			
GEN-1	3.3 3.7		0.18	<u>U</u> ³	0.3g/	<u>hp-hr</u>	<u>28</u>			
Table 106.B: BACT Emission Limits										
Unit No.	NO _x lb/MMBtu	CO lb/MMBtu	VOC lb/MMBtu	SO_2^2	PM ₁₀ lb/MMBtu	PM _{2.5} lb/MMBtu	CO ₂ e lb/MMBtu			
H1	0.049	0.082	0.0054	P	0.0075	0.0075	117			
H2	0.049	0.082	0.0054	₽	0.0075	0.0075	117			
НЗ	0.049	0.082	0.0054	P	0.0075	0.0075	117			
H4	0.06	0.041	0.0054	P	0.0075	0.0075	117			
Н5	0.06	0.041	0.0054	P	0.0075	0.0075	117			
Н6	0.049	0.082	0.0054	P	0.0075	0.0075	117			
VCD1	0.098	0.082	0.21	Р	43		117			

- Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂ and g/bhp-hr stands for grams per brake horsepower hour.
- 2 Pipeline (P) quality natural gas defined as: 5 grains of total sulfur/100 dscf of natural gas and after processing through the inlet separator, amine unit, and TEG dehydrator to remove impurities. Applies to all combustion units (C1-E to C130-E; H1 to H6; FL1 and FL2 pilot and purge gas; and the VCD1).
- 3 "U" means ultra low sulfur diesel (defined as 15 ppm or less sulfur)
- 34 "-" indicates no unit/pollutant specific BACT emission limit applies.

H4 and H5 are no longer subject to Db due to decrease in capacity so that condition was removed.

B. Units H4 and H5 (heaters), nitrogen oxide (expressed as NO₂) emissions shall not exceed 0.10 lbs/MMBtu according to the natural gas low heat release rate standard in 40 CFR 60, Subpart Db (60.44b).

C.B. Units C1-E to C130-E (RICE engines):

- (1) Nitrogen oxides (NOx) emissions shall not exceed 1.0 g/hp-hr (or 82 ppmvd at 15 percent oxygen) in 40 CFR 60, Subpart JJJJ, Table 1.
- (2) Carbon monoxide (CO) emissions shall not exceed 2.0 g/hp-hr (or 270 ppmvd at 15 percent oxygen) in 40 CFR 60, Subpart JJJJ, Table 1.
- (3) Volatile organic compound (VOC) emissions shall not exceed 0.7 g/hp-hr (or 60 ppmvd at 15 percent oxygen) in 40 CFR 60, Subpart JJJJ, Table 1.

- D.C. Units C1-E to C130-E (RICE engines) are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ emission standards at 40 CFR 63.6600(b), Tables 2a and 2b.
- Performance Standards (NSPS) at 40 CFR 60, Subpart IIII. The unit is required to meet the NOx + NMHC, CO, and PM standards at 40 CFR 60.4202(a)(2). These NOx + NMHC, CO, and PM standards are also PSD BACT limits. The unit demonstrates compliance with 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. (new condition)
- <u>Unit FUG</u>, including all equipment, except compressors, within a process unit shall not exceed volatile organic compound (VOC) equipment leak detection standards (500 ppm) according to 40 CFR 60, Subpart OOOO (60.5400).
- G.F. Heaters H1, H3, H4, and H5 are subject to 40 CFR 63, Subpart DDDDD emissions standards specified in 63.7540(a)(10). Heater H6 is subject to the emissions standards at 63.7500(e) and 63.7540(a)(12). (new condition)

A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM), and Pilot and Purge

A. The maximum allowable emissions limits due to routine or predictable startup, shutdown, and/or maintenance (SSM), and pilot and purge flare emissions for this facility are listed in Table 107.A and were relied upon by the Department to determine compliance with applicable regulations. The allowable limits for FL2 in Table 107.A include compressor and associated piping blowdowns during Routine or Predictable Startup, Shutdown, and/or Maintenance (SSM).

Table 107.A	: Allowa	able SS	M Emiss	ion Lin	nits and	Pilot and	l Purge Ei	nission	Limits		
Unit No.	NOx ¹ pph BACT ²	NO _x ¹ tpy	CO pph BACT	CO tpy	VOC pph BACT	VOC tpy	SO ₂ pph BACT	SO ₂ tpy	H ₂ S pph	H ₂ S tpy	CO ₂ e tpy BACT ²
SSM FL1 ³	69579 9.2	4.23.	3782.5 4348.8	22.52 1.1	2558.4 2942.1	10.3 <u>11.</u> <u>8</u>	13,023.6 14977.1	52.1 59.9	141.6 162.9	0. 6 7	5626.07 922 for SSM 1331.0 1404 for pilot and purge
SSM FL2 ³	101.62 .0	1. 6 2	55 <u>2.74.</u> <u>8</u>	<u>86</u> .5	7.8	0. 12 09	5427.4 <u>44</u> 09.8	10.9 <u>2</u> 2.0	<u>59.48</u> <u>.</u> 0	0.42	69.0238 6 for SSM 1331.0 1404 for pilot and purge

Commented [CH13]: FL1 pph emissions increased and tpy emissions decreased.

Commented [CH14]: PPH and TPY emission rates for FL2 increased and decreased slightly, depending on the pollutant.

Table 107.A	Table 107.A: Allowable SSM Emission Limits and Pilot and Purge Emission Limits											
Unit No.	NO _x ¹ pph BACT ²	NO _x ¹ tpy	CO pph BACT	CO tpy	VOC pph BACT	VOC tpy	SO ₂ pph BACT	SO ₂ tpy	H ₂ S pph	H ₂ S tpy	CO ₂ e tpy BACT ²	
SSM (Compressor Blowdown) (CB)	=	Ξ	Ξ	Ξ	<u>358.8</u>	0.8	Ξ	Ξ	Ξ	Ξ	<u>15</u>	
SSM (Plant Venting) (PV)	=	Ξ	=	=	<u>1500.0</u>	12.0	=	=	Ξ.	=	3355	

- Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂.
- 2 Pound per hour limits for NOx, CO, VOC, and SOx and the ton per year limit for CO2e are PSD BACT limits for units FL1, and FL2, and SSM Compressor Blowdown and Plant Venting.
- Allowable SSM emission limits for all pollutants include pilot and purge emissions, except for CO₂e which has separate emission limits for SSM and pilot and purge.
 - B. The authorization of emission limits for startup, shutdown, and maintenance does not supersede the requirements to minimize emissions according to General Conditions B101.F and B107.A.
 - C. SSM Flaring Emissions (FL1 and FL2)

Requirement: The permittee shall perform an extended gas analysis including total sulfur on each flare gas stream (FL1 and FL2), quarterly and complete the following recordkeeping to demonstrate compliance with routine or predictable startup, shutdown, and maintenance (SSM) emission limits in Table 107.A.

Monitoring:

- (1) The permittee shall monitor the permitted routine or predictable startups and shutdowns and scheduled maintenance events.
- (2) A gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage), shall be installed in each flare line to measure and record the total standard cubic feet (scf) of gas sent to each flare during each hour and each month.
- (3) The permittee shall measure the H₂S content, the total sulfur content, the VOC content, the CH4 content, the CO2 content, and the heating value (Btu/scf) of the gas sent to each flare for combustion. H₂S shall be measured at least quarterly as part of a quarterly extended-gas analysis including total sulfur for each gas stream (FL1 and FL2). The total sulfur content, VOC content, CH4, CO2, and heating value (Btu/scf) of the natural gas sent to each flare shall be measured at least quarterly with an extended gas analysis including total sulfur on the flared sour gas (FL2), and flared residue and inlet streams (FL1).
- (4) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Commented [CH16]: Extended gas analysis means speciation of all VOCs. The AQB does not need that as VOCs can be determined without that information. What AQB really wants in the analysis is all sulfur, including mercaptans and thiols. The condition was revised to clarify the intent.

Recordkeeping:

- (1) The following records shall be kept:
 - quarterly extended gas analyses including total sulfur that shall also include H₂S
 - hourly and monthly flowmeter and flow totalizer measurements of gas sent to each flare (FL1 and FL2)
- (2) Each month, the permittee shall use the most recent required sampling to record and summarize in a table format the following information for gas sent to each flare:
 - H₂S and the total sulfur content
 - percent VOC, CH4, and CO2 content
 - gas heating value (Btu/scf)
 - the hourly gas flow rates (scf/hr)
 - the hourly gas flow rate (scf/hr) for any hours that exceeded any pph emission limit during the month
 - the total month's scf of gas sent to each flare
 - during the first 12-months of monitoring, the cumulative total of gas sent to each flare (scf/yr)
 - after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to each flare (scf/yr)
- (3) Each month, the permittee shall record all routine and predictable startups, shutdowns, and scheduled maintenance events for the facility, for each flare gas stream (FL1 and FL2), and shall also meet the recordkeeping requirements in General Condition B109 of this permit, except the requirement to record the start and end times of SSM events shall not apply.
- (4) Records of flowmeter, totalizer, <u>annual</u> calibrations, breakdowns, reasons for breakdown, and corrective actions taken shall be maintained.
- (5) Each month to demonstrate compliance with emission limits in Table 107.A, the permittee shall calculate and summarize the pph emission rates, any pph emission rate exceeding the permitted limits, and the ton per year emission rates of NOx, CO, VOC, SO₂, H₂S, and CO2e using the following information for gas sent to each flare (FL1 and FL2):
 - the H₂S content, total sulfur content, VOC content, CH4, CO2, and the gas heating value (MMBtu/scf) from the most recent H₂S measurements and gas analyses
 - the emission factors used to calculate NOx, CO, and CO₂e
 - the maximum hourly gas flow rate (scf/hr)
 - the hourly gas flow rate (scf/hr) for any hours that exceeded any pph emission limit during the month
 - during the first 12 months of monitoring, the cumulative total of gas sent to each flare
 - after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to each flare (scf/vr)
- (6) The permittee shall also maintain all raw data in accordance with Section B110.

Reporting: The permittee shall report in accordance with Section B110.

D. Pilot and Purge Emissions for CO₂e (FL1 and FL2)

Requirement: The permittee shall demonstrate compliance with the 1331.0 tpy BACT limit for CO₂e (Table 107.A) by measuring and limiting the pilot and purge gas flow rates to: 20.2 MMscf/yr per flare.

Monitoring:

- (1) A gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage), shall be installed in each flare line (FL1 and FL2) to measure and record the total standard cubic feet (scf) of pilot and purge gas sent to each flare during each month.
- (2) The chart recorder or data logger, flowmeter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Recordkeeping:

(1) The following records shall be kept:

- The monthly total volume (scf) from flowmeter and flow totalizer measurements of pilot and purge gas sent to each flare (FL1 and FL2)
- during the first 12-months of monitoring, the cumulative total of pilot and purge gas sent to each flare (scf/yr)
- after the first 12-months of monitoring, the monthly rolling 12-month total of pilot and purge gas sent to each flare (scf/yr)
- (2) Records of flowmeter, totalizer, <u>annual</u> calibrations, breakdowns, reasons for breakdown, and corrective actions taken shall be maintained as per Condition A107.C and shall also be applied to this condition.

Reporting: The permittee shall report in accordance with Section B110.

E. SSM Direct Venting Emissions (Units CB and PV) (new condition)

Requirement: The permittee shall perform an analysis on the vented gas once every year and complete the following recordkeeping to demonstrate compliance with routine or predictable startup, shutdown, and maintenance (SSM) emission limits in Table 107.A.

Emissions Due to Preventable Events-Emissions that are due entirely or in part to poor maintenance, careless operation, or any other preventable equipment breakdown shall not be included under the SSM emission limits. These emissions shall be reported as excess emissions in accordance with 20.2.7.110 NMAC.

Monitoring: The permittee shall monitor the permitted routine or predictable startups and shutdowns and scheduled maintenance events.

Recordkeeping: To demonstrate compliance, each month records shall be kept of the cumulative total of VOC emissions during the first 12 months and, thereafter of the monthly rolling 12 month total of VOC emissions.

Records shall also be kept of the gas analysis, the percent VOC of the gas based on the most recent gas analysis and of the volume of total gas vented in MMscf used to calculate the VOC emissions.

The permittee shall record the demonstrated compliance in accordance with Condition B109, except the requirement in B109.C to record the start and end times of SSM events shall not apply to the venting of known quantities of VOC.

Reporting: The permittee shall report in accordance with Section B110.

F. BACT Requirements for SSM events (FL1, FL2, CB, and PV) (new condition)

Requirement:

- (1) Emissions that are due entirely or in part to malfunctions, poor maintenance, careless operation, or any other preventable equipment breakdown shall not be included under the SSM emission limits. These emissions shall be reported as excess emissions in accordance with 20.2.7.110 NMAC.
- (2) The permittee shall minimize the frequency, duration, and quantities of air emissions during routine or predictable startup, shutdown, and scheduled maintenance (SSM). This shall be done by creating, updating, and implementing the plan required by 20.2.7.14 NMAC which, at a minimum, shall include work practice standards and good air pollution control practices with the goal of minimizing emissions during SSM events.

Monitoring:

- (1) The plan required by 20.2.7.14 NMAC shall include a description of the parameters that are necessary to monitor to ensure emissions during SSM are minimized.
- (2) The permittee shall complete these monitoring activities with enough frequency to ensure compliance with the plan requirements.

Recordkeeping:

- (1) The plan required by 20.2.7.14 NMAC shall include recordkeeping that ensures the monitoring activities are documented and to confirm that the work practice standards and good air pollutant control practices in the plan are met.
- (2) The permittee shall keep the plan records and shall meet the recordkeeping requirements in Section B109.

Reporting: The permittee shall report in accordance with Section B110.

A108 Facility: Operating Hours and Limits on Capacity

- A. Except for limits on operating hours for emergency generator GEN-1, Tethis facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting are required to demonstrate compliance with continuous hours of operation.
- B. Limit on Gas Plant Inlet (new condition)

Requirement: To demonstrate compliance with the PSD source capacity used as assumptions for regulated source emission limits in Table 106.A and BACT limits in Table 106.B, the permittee shall limit the volumetric flowrate to the facility inlets to no more than a maximum capacity of 230 MMscf/day of natural gas.

Commented [CH17]: PSD permits require a limit on capacities that, if changed, can debottleneck a process and result in an increase in emissions from other sources. Also, the permit is to reflect the permittee's intention.

Monitoring: No monitoring is required. Compliance is demonstrated through recordkeeping. **Recordkeeping:** The permittee shall continuously monitor the daily volumetric flowrate to the facility inlets using gas flowmeter(s) and flow totalizer(s) that are equipped with a chart recorder or data logger (electronic storage).

The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Reporting: The permittee shall report in accordance with Section B110.

Moved A108.B Lusk Booster Station Shutdown Condition to A113. A.

A109 Facility: Reporting Schedules

A. The permittee shall report according to the Specific Conditions and General Conditions of this permit.

A110 Facility: Fuel and Fuel Sulfur Requirements - Pipeline Quality Natural Gas

A. Fuel and Fuel Sulfur Requirements: Units C1-E to C130-E, H1 to H6, VCD1, and the pilot/purge/supplemental fuel for Flares (Units FL1, and FL2, and FL3) (added FL3)

Requirement:

- (1) To demonstrate compliance with the PM2.5, PM10, SO2, and CO2e pph, tpy, and BACT emission limits in Tables 106.A, 106.B, and 107.A, all listed combustion emission units shall combust only pipeline quality natural gas containing no more than 5.0 grains of total sulfur per 100 dry standard cubic feet.
- (2) For the purposes of this permit, pipeline quality natural gas is defined as having no more than 5 gr total sulfur/100 dscf and processed through the inlet separator, amine unit, and TEG dehydrator to remove impurities (or equivalent if fuel gas is received from outside the plant). If fuel gas is received from outside the facility the permittee shall maintain records of a current, valid purchase contract, tariff sheet or transportation contract for the fuel gas purchased, including fuel gas analysis specifying the fuel meets the defined sulfur content and processing requirements.

Monitoring: Monitoring is not required. Compliance is demonstrated through recordkeeping.

Recordkeeping: The permittee shall demonstrate compliance with the pipeline quality natural gas limit on total sulfur content by maintaining records of fuel gas analyses, specifying the total sulfur content. The analyses shall not be older than six months or if purchased, a valid purchase contract not older than one year.

Reporting: The permittee shall report in accordance with Section B110.

A111 Facility: 20.2.37 NMAC Particulate Matter

A. 20.2.37 NMAC Particulate Matter: Entire Facility

Requirement: The entire facility is subject to 20.2.37 NMAC. Pursuant to 20.2.37.202.A NMAC, particulate emissions from fuel burning equipment shall not exceed 0.05 gr/dscf of exit gas. The permittee shall demonstrate compliance with 20.2.37.202.A NMAC through the use of pipeline quality natural gas as defined at A110.A.

Monitoring: The permittee shall meet the monitoring in Condition A110.A.

Recordkeeping: The permittee shall recordkeeping requirements in Condition A110.A.

Reporting: The permittee shall report according to Section B110.

A112 Facility: Haul Roads

A. Haul Road Control (Unit HAUL) (Revised to reflect paving of road)

Requirements: The haul road shall be paved, maintained, and cleaned as necessary to reduce the amount of traffic dust from the road. This requirement is to demonstrate compliance with the TSP, PM10, and PM2.5 (pph and tpy) emission limits in Table 106.A and the BACT control requirements in Table 105 for unit HAUL.

Monitoring: The permittee shall inspect the condition of the pavement at least every 12 months.

Recordkeeping: The permittee shall record the dates of inspections, and any maintenance required to the paying.

Reporting: The permittee shall report in accordance with Section B110.

A113 Requirements - Unit Removals and Facility Shutdown (Units C11-E to C13E and Lusk Booster Station)

A. Coordination of startup of Zia II Gas Plant and the closure of the Lusk Booster Station, except Unit FL3 (moved from A108.B and revised to allow FL3 to continue operating)

Requirement: The inlet compressors at DCP's Zia II Gas Plant replace DCP's existing Lusk Booster Station, permitted under, as permitted in New Source Review (NSR) Permit No. 355-M67 and Title V Permit No. P093R3.

Except for the pilot and purge gas from the Lusk Booster Station Flare, the regulated sources at the Lusk Booster Station were not included in the ambient impact analyses for the Zia II Gas Plant. Therefore, to demonstrate compliance with state and federal ambient air quality standards, except for the Lusk Booster Station Flare, all of To demonstrate compliance with state and federal ambient air quality standards, DCP's Lusk Booster Station combustion sources listed in Table 104 of its permits shall cease operatingons within 60 days of startup of any regulated combustion source listed in Table 104 of the Zia II Gas Plant permitof. Startup is defined at C101.Q.

The Lusk Booster Station Flare will be used by the Zia II Gas Plant as an emergency flare, therefore it is transferred to the Zia II Gas Plant permit as reflected in the application. The flare is designated in the Zia II Gas Plant permit as Unit FL3, Lusk Emergency Flare.

Monitoring: Monitoring is not required. Compliance is demonstrated through recordkeeping. **Recordkeeping:** Unless already submitted, wWithin 15 days, the permittee shall submit to the Compliance and Enforcement Section Manager, the startup date and unit number(s) of the regulated unit(s) at DCP's Zia II Gas Plant and the date that all regulated combustion equipment at the Lusk Booster station, except for the flare, the permittee shall submit to the Compliance and Enforcement Section Manager, the startup date and unit number(s) of the regulated unit(s) at DCP's Zia II Gas Plant and the date that the Lusk Booster stationhas ceased operations. Within 120 days of startup of any regulated unit at DCP's Zia II Gas Plant, DCP shall submit to the Permit Section Program Manager a request to cancel the Lusk Booster Station NSR and Title V -permits (20.2.70.400.I NMAC). The cancellation of the Lusk Booster Station Title V permit will become effective upon receipt by the Department.

Reporting: Unless already submitted, wWithin 15 days, the permittee shall submit to the Compliance and Enforcement Section Manager, the startup date and unit number(s) of the regulated unit(s) at DCP's Zia II Gas Plant and the date that all regulated combustion equipment at the Lusk Booster station, except for the flare, the permittee shall submit to the Compliance and Enforcement Section Manager, the startup date and unit number(s) of the regulated unit(s) at DCP's Zia II Gas Plant and the date that the Lusk Booster stationhas ceased operations. Within 120 days of startup of any regulated unit at DCP's Zia II Gas Plant, DCP shall submit to the Permit Section Program Manager a request to cancel the Lusk Booster Station NSR and -Title V -permits (20.2.70.400.I NMAC). The cancellation of the Lusk Booster Station Title V permit will become effective upon receipt by the Department.

B. Removal of Compressor Engines (Units C11-E to C13-E; H2, and H4-H5) (new condition)

Requirement: This condition specifies deadlines required by the permittee to remove regulated equipment from its permit or to reduce the permitted capacity of regulated units to ensure compliance with any federally enforceable emissions reductions required by the current air quality permit.

In accordance with representations in the application for permit number PSD-5217-M1, removed from the Zia II Gas Plant air quality permit is the authority to construct and operate compressor engines C11-E through C13-E and heater H2. The permit also reduces the allowable capacities of heaters H4 and H5 from 114 to 99 MMBtu/hr.

In accordance with application for PSD5217-M1, engines C11-E to C13-E were never constructed, heaters H4 and H5 never had a capacity over 99 MMBtu/hr, and these removed units and higher capacities were not included in the ambient impact analysis for the revised permit PSD-5217-M1.

Monitoring: Monitoring is not required. Compliance is demonstrated through recordkeeping. **Recordkeeping:** The permittee shall meet the record keeping requirements in Condition

A113.A and shall keep records of H4 and H5 that can be used to verify the actual maximum capacities of the units.

Reporting: The permittee shall report according to Section B110.

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry

C. This section has common equipment related to most Oil and Gas Operations.

A201 Engines and Compressors

A. Initial Compliance Tests NOx, CO, PM10, and PM2.5 (Units C1-E through C130-E) **Requirement:** The permittee shall demonstrate compliance with the allowable NOx, CO,

VOC, PM10, and PM2.5 (pph and tpy) emission limits in Table 106.A and the BACT limits in Table 106.B by completing the following initial compliance testing on engines C1-E to C130-E.

These initial compliance test requirements are carried forward from permit number PSD5217 issued 4-24-14 and this condition does not re-impose duplicate initial compliance testing requirements, except as required by Condition A100.A.

- (1) EPA Reference Method Tests for NOx and CO, listed in Condition B111.B, shall be completed on each engine.
- (2) Compliance with the CO emission limits shall be deemed to demonstrate compliance with the VOC emission limits.
- (3) EPA Reference Method Tests for TSP and condensable particulate matter (CPM) listed in Condition B111.B shall be completed on at least 3 of Units C1-E to C8-E and on at least 3 of Units C9-E to C130-E.
- (4) Test results for filterable TSP and CPM shall be combined to verify compliance with allowable TSP, PM10, and PM2.5 emission limits in Table 106.A and with the PM10 and PM2.5 BACT limits in Table 106.B.
- (5) The tests required for TSP and CPM shall be extended to 2-hour test runs to ensure accurate samples are obtained.
- (6) Tests shall be completed in accordance with Section B111 of this permit, including the timeframe(s) according to B111.A(2).

Monitoring: The permittee shall monitor all parameters necessary to meet the recordkeeping requirements of this condition.

Recordkeeping:

(1) During each NOx and CO test run, records shall include at a minimum the following

information measured during the test, the operating horsepower (hp) during testing, the lb/hr emission rate, the g/hp-hr emission rate, and all parameters used to calculate emission rates.

- (2) During each TSP and CPM test run, records shall include at a minimum the following information measured during the test run, the operating horsepower (hp) during testing, the lb/hr emission rate, the fuel heat value (Btu/scf), the fuel consumption (scf/hr), the lb per fuel heat rate (lb/MMBtu), and all parameters used to calculate the emission rates.
- (3) The permittee shall use the most current gas analysis to determine the fuel heat value (Btu/scf) and measure the actual fuel flow rate to that engine during the test.
- (4) All calculations used to determine emission rates shall be included with the test records.
- (5) The permittee shall maintain records in accordance with the applicable Sections in B109, B110, and B111.

Reporting:

- (1) The test report shall summarize the records required by this condition.
- (2) The permittee shall report in accordance with the applicable Sections in B109, B110, and B111.

B. Periodic Testing NOx and CO (Units C1-E through C130-E)

Requirement: The permittee shall demonstrate compliance with the allowable NOx, CO, and VOC emission limits in Table 106.A and the BACT limit in Table 106.B by completing the following periodic stack testing on engines C1-E to C130-E.

Monitoring: The permittee shall test for NOx and CO using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. Testing shall be carried out as described below.

Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

- (1) The monitoring period shall be quarterly. The quarterly monitoring period shall be defined as: January 1 to March 31; April 1 to June 30; July 1 to September 30; and October 1 to December 31.
- (2) The first test shall occur within the first monitoring period occurring after initial testing required in A201.A.
- (3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
- (4) The permittee shall follow the General Testing Procedures of Section B111.
- (5) Performance testing required by 40 CFR 60, Subpart JJJJ or 40 CFR 63, Subpart ZZZZ may be used to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.
- (6) The permittee shall monitor all parameters necessary to meet the recordkeeping requirements of this condition.

Recordkeeping:

(1) During each NOx and CO test run, records shall include at a minimum the following information measured during the test, the operating horsepower (hp) during the testing, the

lb/hr emission rate, the g/hp-hr emission rate, and all parameters used to calculate emission rates.

- (2) All calculations used to determine emission rates shall be included with the test records.
- (3) All records of portable analyzer calibrations and certifications of calibration gases.
- (4) The permittee shall maintain records in accordance with Sections B109, B110, and B111.

Reporting:

- (1) The test report shall summarize the records required by this condition.
- (2) The permittee shall report in accordance with Sections B109, B110, and B111.
 - C. Fuel Flow Monitoring CO2e (Units C1-E through C130-E) (units C11-E to C13-E were removed)

Requirement: The permittee shall demonstrate compliance with the allowable CO2e BACT limits in Table 106.B by completing fuel flow monitoring and calculations for engines C1-E to C130-E.

Monitoring:

- (1) To measure the monthly fuel consumption (scf/month) to each engine, a gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage) capable of recording hourly flow volumes, shall be installed in the fuel line to each engine.
- (2) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Recordkeeping:

The following records shall be kept:

- (1) the monthly flowmeter and flow totalizer measurements of fuel gas sent to each engine
- (2) the fuel heating value (Btu/scf), CH4, and CO2 content of the natural gas sent to each engine obtained from the gas analyses required in A110.A
- (3) the calculations used to determine the monthly CO2e emissions using the methods in 40 CFR 98, Subpart C
- (4) during the first 12 months of monitoring, the cumulative ton per year (tpy) CO2e emissions for each engine
- (5) after the first 12-months of monitoring, the monthly rolling 12-month total of CO2e tpy emissions for each engine
- (6) Records of flowmeter, totalizer, and inline monitor certifications, <u>annual</u> calibrations, breakdowns, reasons for the breakdown, and corrective actions taken shall be maintained.
- (7) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

D. Maintenance, Repair, and Good Combustion Practices (GCP) (Units C1-E through C130-E) (units C11-E to C13-E were removed)

Requirement: To demonstrate compliance with the BACT limits in Table 106.B, the permittee shall meet the following Good Combustion Practices (GCPs).

(1) Each engine shall be a "new" engine based on engine technical data sheets provided in the permit application to the Department (engines shall be manufactured after August 9, 2011) and

manufactured with an integrated air-fuel ratio controller (AFR) and ultra-lean burn and low NOx technology.

- (2) The permittee shall operate each engine at the combustion temperature recommended by the manufacturer.
- (3) Each engine shall be maintained and tuned at least once per 12-months, or more frequently if recommended by the manufacturer.
- (4) The permittee shall submit, in a searchable electronic format, the manufacturer's specifications and recommended maintenance and tune up requirements along with a written site specific inspection and maintenance protocol to the Permit Section Manager within 3 months after all engines have started operating or PSD5217-M1 permit issuance, whichever is laterfacility start up.
- (5) The permittee shall implement the site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.
- (6) To ensure on-going good combustion practice of the units, the permittee shall update the inspection and maintenance protocol as needed based on operational experience with the units.

Monitoring: At a minimum, tThe permittee shall complete the following monitoring according to the inspection and maintenance protocol:

- (1) inspect the air to fuel ratio, oxygen range, and temperature at the frequency specified by the approved protocol and updates to that protocol
- (2) complete additional monitoring according to protocol updates to that protocol.

Recordkeeping:

- (1) The permittee shall maintain a copy of the manufacturer's engine specifications and recommended maintenance and tune-up requirements along with a written site specific inspection and maintenance protocol.
- (2) The permittee shall maintain records of the dates and the results of inspections of the air to fuel ratio, oxygen range, and temperature; and the tune ups and maintenance.
- (3) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

E. Oxidation Catalyst Operation (Units C1-E through C130-E) (units C11-E to C13-E were removed)

Requirement: To demonstrate compliance with the CO and VOC emission limits in Table 106.A and 106.B, and meet the requirements of NSPS JJJJ and NESHAP ZZZZ, the permittee shall meet the following control requirements.

- (1) The units C1-E through C130-E shall be equipped and operated with an oxidation catalyst to control CO, VOC, and HAP emissions.
- (2) The permittee shall maintain the oxidation catalysts according to manufacturer's or supplier's recommended maintenance, including replacement of oxygen sensor as necessary for oxygen-based controllers.

Monitoring: The engines shall be operated with the oxidation catalysts at all times of operation, including during catalyst maintenance periods. During periods of catalyst maintenance, the permittee shall either (1) shut down the engine(s); or (2) replace the catalyst

Commented [CH18]: DCP: Thank you for submitting this information. The submittals were large, so we need searchable electronic versions of this information in order to look up what is required.

with a functionally equivalent spare to allow the engine to remain in operation.

Recordkeeping:

- (1) The permittee shall maintain records of the manufacturer's or supplier's recommended maintenance, catalyst specifications, actions taken during periods of catalyst maintenance, and of the maintenance performed.
- (2) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

F. 40 CFR 60, Subpart JJJJ (Units C1-E through C130-E) (units C11-E to C13-E were removed)

Requirement: The units will be subject to 40 CFR 60, Subparts A and JJJJ and the permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart JJJJ.

Monitoring: The permittee shall comply with all applicable monitoring and testing requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4243.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245 and Section B110 of this permit.

G. 40 CFR 63, Subpart ZZZZ (Units C1-E through C130-E and GEN-1) (units C11-E to C13-E were removed and GEN-1 is new)

Requirement: The units will be subject to 40 CFR 63, Subparts A and ZZZZ and the permittee shall comply with any applicable notification requirements in Subpart A and any applicable requirements of Subpart ZZZZ.

Unit GEN-1 shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII_(40 CFR 63.6590(c)(6).

Monitoring: The permittee shall comply with all applicable monitoring and testing requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to 63.6655 and 63.10.

Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to 63.6645, 63.6650, 63.9, and 63.10, and Section B110.

H. 40 CFR 60, Subpart IIII and BACT Requirements (Unit GEN-1) (new condition)

Requirement: The unit is subject to 40 CFR 60, Subparts A and IIII and shall comply with the notification requirements in Subpart A and with the specific requirements of Subpart IIII. This unit is required to meet the NOx, HC, NMHC+NOx, CO and PM standards at 40 CFR 60.4202(a)(2).

Meeting the NOx, CO, and PM emissions standards in 40 CFR 60, Subpart IIII are the BACT requirements for this unit (See Table 105).

The Subpart IIII standards cited are for emergency generators. As an emergency generator unit GEN-1 must meet the operational requirements in 60.4211(f)(1) through f(3).

To meet the Subpart IIII and BACT requirements, Unit GEN-1 shall combust only Diesel Fuel or No. 2 Fuel Oil and the sulfur content of the fuel shall not exceed 0.0015% sulfur by weight.

Monitoring: The permittee shall comply with all applicable testing and monitoring requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4211.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4214.

The permittee shall demonstrate compliance with the fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the fuel, or fuel gas analysis, specifying the total sulfur content. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel. If fuel gas analysis is used, the analysis shall not be older than one year.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4214. The permittee shall also report in accordance with Section B110.

I. Operating Hour BACT Requirement (Unit GEN-1) (new condition)

Requirement: Unit GEN-1 is subject to a CO2e BACT requirement in Table 105 which limits total operating time to 500 hours per 12 months. The permittee shall demonstrate compliance with this BACT requirement by meeting the following monitoring and recordkeeping.

Monitoring: The permittee shall monitor the operating hours of each unit with a non-resettable hour meter installed on each unit.

Recordkeeping: The permittee shall keep the following operating hour records:

- 1) During the first 12 months of monitoring, the cumulative total of operating hours per unit.
- 2) After the first 12 months of monitoring, the monthly rolling 12-month total operating hours per unit.

Reporting: The permittee shall report according to Section B110.

J. 40 CFR 60, Subpart OOOO (Compressor Units C1-C through C15-C)

Requirement: The <u>compressorsunits</u> <u>are will be</u> subject to 40 CFR 60, Subparts A and OOOO in accordance the applicability date in 40 CFR 60.5365 and the permittee shall comply with the notification requirements in Subpart A and the applicable requirements of Subpart OOOO, including standards in 60.5385.

Monitoring: The permittee shall comply with all applicable monitoring requirements in 40

CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5410 and 60.5415.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5420.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5420, and Section B110.

K. 20.2.61 NMAC Opacity Limit (Unit GEN-1) (new condition)

Requirement: Visible emissions from all emission stacks of all **compression ignition** engines shall not equal or exceed an opacity of 20 percent in accordance with the requirements at 20.2.61.109 NMAC.

Monitoring:

- (1) For emergency, standby, or limited use compression ignition engines, the permittee shall at least once every calendar year measure opacity on each Unit for a minimum of 10 minutes in accordance with the procedures of 40 CFR 60, Appendix A, Method 9. The permittee shall also measure opacity on a Unit's emissions stack when any visible emissions are observed during steady state operation.
- (2) Alternatively for any compression ignition engine, if visible emissions are observed during steady state operation, within 1 hour of seeing visible emissions, the permittee shall shut down the engine and perform maintenance and/or repair to eliminate the visible emissions. Following completion of equipment maintenance and/or repair, the permittee shall conduct visible emission observations following startup in accordance with the following procedures:
 - Visible emissions observations shall be conducted over a 10-minute period during operation after completion of startup mode in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 22 (EPA Method 22). If no visible emissions are observed, no further action is required.
 - If any visible emissions are observed during completion of the EPA Method 22 observation, subsequent opacity observations shall be conducted over a 10-minute period, in accordance with the procedures at EPA Method 9 as required by 20.2.61.114 NMAC.

For the purposes of this condition, *Startup mode* is defined as the startup period that is described in the facility's startup plan.

Recordkeeping: If any visible emissions observations were conducted, the permittee shall keep records in accordance with the requirements of Section B109 and as follows:

- For any visible emissions observations conducted in accordance with EPA Method 22, record the information on the form referenced in EPA Method 22, Section 11.2.
- For any opacity observations conducted in accordance with the requirements of EPA Method 9, record the information on the form referenced in EPA Method 9, Sections 2.2 and 2.4.

For each emergency, black start, and limited use compression ignition engine, the permittee shall

also record the number of operating hours per year of each Unit and the reason for operating the unit.

Reporting: The permittee shall report in accordance with Section B110.

L. Maintenance and Repair Monitoring (Unit GEN-1) (new condition)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by properly maintaining and repairing the unit in a manner consistent with good air pollution control practice for minimizing emissions in accordance with 40 CFR 60.4209(g)

Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur for the following events:

- (1) Routine maintenance that takes a unit out of service for more than two hours during any twenty-four hour period.
- (2) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.

Recordkeeping: The permittee shall maintain records in accordance with Section B109, including records of maintenance and repair activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

The permittee shall also maintain records demonstrating that the Integral Turbocharged & Charge Air Cooled part of engine design (required in Table 105) is installed and shall meet all recordkeeping requirements at 60.4209(g).

A202 Glycol Dehydrators

A. Control Device Inspection (Unit Dehy)

Requirement: To demonstrate compliance with the allowable VOC emission limits in Table 106.A and the BACT control requirements in Table 105, the permittee shall meet the following control requirements for Unit Dehy.

- (1) The flash tank vent shall be routed at all times to a process point that allows the off-gas to be recycled to the low pressure inlet stream and recompressed.
- (2) The still vent emissions shall be routed at all times to the condenser (BTEX condenser).
- (3) The TEG regenerator, flash tank, and condenser system shall be a closed vent system and be designed and operated so that no gases are vented or emitted directly to the atmosphere.
- (4) Non-condensables from the BTEX condenser shall be sent to the vapor combustion device (Unit VCD1) for destruction. The VCD1 shall be installed, operated, and maintained according to manufacturer's specifications and shall have a 98% or greater destruction rate efficiency (DRE) (monitoring according to Condition A211).

Monitoring: The permittee shall inspect the glycol dehydrator and the control equipment semi-annually to ensure all equipment components are operating as initially designed and in

accordance with the manufacturer's recommended procedures.

Recordkeeping: The permittee shall record the results of all equipment and control device inspections chronologically, noting any maintenance or repairs needed to bring the dehydrator into compliance. The permittee shall maintain a copy of the manufacturer's maintenance recommendations.

Reporting: The permittee shall report in accordance with Section B110.

B. 40 CFR 63, Subpart HH (Unit Dehy)

Requirement: The unit is subject to 40 CFR 63, Subpart HH and the permittee shall comply with all applicable requirements.

Monitoring: The permittee shall monitor as required by 40 CFR 63.772(b)(2) to demonstrate that the facility is exempt from general standards.

Recordkeeping: The permittee shall generate and maintain the records required by 40 CFR 63.774(d)(1)(ii) to demonstrate compliance with the general standard exemptions found in 40 CFR 63.764(e).

Reporting: The permittee shall meet all applicable reporting in 40 CFR 63, Subparts A and HH and in Section B110.

A203 Tanks and Truck Loading

A. Tank Operation (Units TK1, TK2, TK-C, TK-G, and TK-H)

Requirement: To demonstrate compliance with the allowable VOC emission limits and BACT control requirements in Table 105, the permittee shall meet the following requirements for the tanks.

- (1) The condensate tank and produced water tank vents shall be routed at all times to the vapor combustion device (VCD1).
- (2) There shall be no flash emissions from the condensate tanks TK1 and TK2. Flashing emissions shall be captured and managed prior to reaching the condensate tanks. Emissions shall be routed back to the low pressure inlet to prevent flashing emissions to the atmosphere.
- (3) All of these tanks shall have fixed roofs with blanket gas and be filled through a submerged fill pipe.

Monitoring: The permittee shall conduct the following monitoring on a semi-annual basis:

- (1) inspect the closed vent system to the flash gas stabilizer equipment to ensure that it is capturing all flash emissions prior to reaching the condensate tanks,
- (2) inspect each condensate tank and water tank vent and the closed vent system to ensure proper routing to the VCD1, and
- (3) inspect each tank, the VCD1, and associated piping for corrosion and gas leaks.
- (4) Although the tanks are not subject to NSPS OOOO, the leak detection monitoring required by 40 CFR 60, Subpart OOOO may be used to satisfy monitoring of the closed vent system for corrosion and gas leaks if they meet or exceed the requirements of this condition.

Recordkeeping:

(1) The permittee shall maintain records of the tanks to include the following:

- a) Tank capacity
- b) Material stored
- c) Fill pipe design
- (2) The permittee shall record the results of all semi-annual equipment inspections, and annual tank inspections chronologically, noting any maintenance or repairs needed to bring the condensate tanks, water tanks, and closed loop system into compliance with permit conditions.
- (3) Records shall also be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

B. Truck Loading - Condensate Loadout (Unit L1)

Requirement: To demonstrate compliance with the allowable VOC (pph and tpy) emission limits in Table 106.A and the BACT control requirements in Table 105, the permittee shall meet the following control requirements:

(1) Loadout to trucks shall occur through a submerged process to minimize off-gas vapors, and (2) a sleeve or vapor capturing device shall direct and route off-gas vapors during truck loadout to a vapor combustion device (VCD1) for destruction.

Monitoring:

- (1) The permittee shall monitor during each condensate truck load-out to ensure that the process meets the control requirements.
- (2) Semi-annually, the permittee shall inspect the closed vent system that routes the off-gases to the VDC1.

Recordkeeping:

- (1) The permittee shall record the dates of each loadout and maintain a checklist that verifies submerged loading and hook up to the closed vent system routing the off-gas vapors to the VDC1.
- (2) The permittee shall record the dates of and the closed vent system inspections, and any repairs needed.
- (3) Records shall also be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

A204 Heaters/Boilers

Maintenance, Repair, and Good Combustion Practices (GCP) (Units H1, H3 to H6)
 (Heater H2 was removed from the facility condition and condition revised based on submittals)

Requirement: To demonstrate compliance with allowable emission limits in Table 106.A and the BACT limits in Table 106.B, the permittee shall meet the following Good Combustion Practices (GCPs).

- (1) Heaters H4 and H5 shall be low heat release, natural gas fired heaters as defined in 40 CFR 60, Subpart Db. Heaters H1, H2, H3, H4, H5, and, and through H6 shall be fueled only by pipeline quality natural gas. also be natural gas fired.
- (2) Each heater shall meet any guaranteed emission rates as provided by the manufacturer.

- (3) The permittee shall operate each heater at the combustion air temperature and excess combustion air (%) recommended by the manufacturer.
- (4) Each heater shall be maintained and tuned at least once per 12-months, or more frequently if recommended by the manufacturer.
- (5) For Heaters H4, H5 and H6: For approval by the Department, tThe permittee shall submit, in a searchable electronic format, the manufacturer's heater specifications and recommended maintenance and tune up requirements along with a written site specific inspection and maintenance protocol to the Permit Section Manager within 3 months of heater startup or PSD5217-M1 permit issuance, whichever is later facility start up. Each specification sheet and manufacturer's maintenance manual shall have the heater unit number(s) written on the front cover of the document.
- (6) For Heaters H1 and H3: Within 3 months after all heaters have started operating or after PSD5217-M1 permit issuance, whichever is later, the permittee shall submit, in a searchable electronic format, the most current versions of the DCP Midstream Gas Fired Burner Management System manual and the DCP Midstream Preventative Maintenance and Inspections Guidelines and Practices manual that.
- (7) For Heaters H1, H3, H4, H5, and H6: Within 3 months after all heaters have started operating or after PSD5217-M1 permit issuance, whichever is later, the permittee shall provide a table that lists each heater unit number and each chapter and each section from the DCP Midstream Gas Fired Burner Management System manual and from the DCP Midstream Preventative Maintenance and Inspections Guidelines and Practices manual that applies to each heater. Only the chapters and sections that affect regulated air emissions shall be listed.

 (8) All submittal requirements in this condition shall be to the attention of the Permit Program Manager.
- (8) The permittee shall implement the proposed site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.
- (9) To ensure on-going good combustion practice of the units, the permittee shall update the inspection and maintenance protocol as needed based on operational experience with the units.

Monitoring: The permittee shall complete the following monitoring according to the inspection and maintenance protocol:

- (1) Monitor the combustion air temperature and excess combustion air (%) at the frequency specified by the approved protocol, or more frequently as necessary.
- (2) Complete additional monitoring according to the approved protocol and updates to that protocol.

Recordkeeping:

- (1) The permittee shall maintain a copy of the manufacturer's heater specifications and recommended maintenance and tune-up requirements along with a written site specific inspection and maintenance protocol approved by the Department.
- (2) The permittee shall maintain a table that lists each heater unit number and each chapter and each section from the most current versions of the DCP Midstream Gas Fired Burner Management System manual and the DCP Midstream Preventative Maintenance and Inspections Guidelines and Practices manual that applies to each heater.
- (3) The permittee shall maintain records of the dates and the results of maintenance and

Commented [CH19]: Information is still needed. For heaters H4, H5, and H6, the information provided on 9-2-15 and 4-21-15 are for different heater manufacturers than then ones permitted.

Commented [CH20]: We are requesting this since these manuals were supposed to submitted 3 months after the units started operating not before. We would also appreciate searchable electronic versions of these documents since the original, hard copy submittals are rather large.

In the future, if this information is available when an application is submitted and a requested control technology is GCP, then the GCP plan should be submitted with the application so that a condition can be written for GCP.

monitoring of the combustion air temperature and excess combustion air (%) and shall include the recommended or target temperature and excess combustion air, based on manufacturer's specifications and/or operational practice. -

(4) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with this condition and Section B110.

3. Initial Compliance Test NOx, CO, and VOC (Units H4 and H5)

Requirement: The permittee shall demonstrate compliance with the allowable NOx, CO, and VOC emission limits in Table 106.A and the BACT limits in Table 106.B by completing the following initial compliance testing on heaters H4 and H5.

These initial compliance test requirement are carried forward from permit number PSD5217 issued 4-24-14 and this condition does not re-impose duplicate initial compliance testing requirements, except as required by Condition A100.A.

- (1) EPA Reference Method Tests for NOx and CO, listed in Condition B111.B, shall be completed on each heater.
- (2) Compliance with the CO emission limits shall be deemed to demonstrate compliance with the VOC emission limits.
- (3) Tests shall be completed in accordance with Section B111 of this permit.

Monitoring: The permittee shall monitor all parameters necessary to meet the recordkeeping requirements of this condition.

Recordkeeping:

- (1) During each NOx and CO test run, records shall include at a minimum the following information measured during the test run, the lb/hr emission rate, the fuel heat value (Btu/scf), the fuel consumption (scf/hr), the lb per fuel heat rate (lb/MMBtu), and all parameters used to calculate emission rates.
- (2) The permittee shall use the most current gas analysis to determine the fuel heat value (Btu/scf) and measure the actual fuel flow rate to that heater during the test.
- (3) Records shall include the stack gas temperature, the level of excess air, and the percent moisture.
- (4) All calculations used to determine emission rates shall be included with the test records.
- (5) The permittee shall maintain records in accordance with the applicable Sections in B109, B110, and B111.

Reporting:

- (1) The test report shall summarize the records required by this condition.
- (2) The permittee shall report in accordance with the applicable Sections in B109, B110, and B111.

C. Fuel Flow Monitoring CO2e (Units H4 and H5)

Requirement: The permittee shall demonstrate compliance with the allowable CO2e BACT limits in Table 106.B by completing fuel flow monitoring and calculations for heaters H4 and H5.

Monitoring:

- (1) To measure monthly fuel consumption (scf/month) to each heater, a gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage) capable of recording hourly flow volumes, shall be installed in the fuel line to each heater.
- (2) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Recordkeeping:

The following records shall be kept:

- (1) The monthly flowmeter and flow totalizer measurements of fuel gas sent to each heater.
- (2) The fuel heating value (Btu/scf), CH4, and CO2 content of the natural gas sent to each heater obtained from the gas analyses required in A110.A.
- (3) The calculations used to determine the monthly CO2e emissions using the methods in 40 CFR 98, Subpart C.
- (4) During the first 12 months of monitoring, the cumulative ton per year (tpy) CO2e emissions for each heater.
- (5) After the first 12-months of monitoring, the monthly rolling 12-month total of CO2e tpy emissions for each heater.
- (6) Records of flowmeter, totalizer, and inline monitor certifications, <u>annual</u> calibrations, breakdowns, reasons for the breakdown, and corrective actions taken shall be maintained.

Reporting: The permittee shall report in accordance with Section B110.

D. 40 CFR 60, Subpart Dc (Unit H1 H3, H4 and H5) (all heaters are now subject to Dc. Condition for Db was removed as there are no heaters subject to it.)

Requirement: The unit(s) is subject to 40 CFR 60, Subpart Dc and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart Dc.

Monitoring:

- (1) The permittee shall demonstrate the facility is exempt from the SO₂ standard at 60.42c and monitoring at 60.46c by complying with Condition A110.
- (2) The permittee shall demonstrate the facility is exempt from the PM standard at 60.43c and monitoring at 60.47c by complying with Condition A110.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c.

Reporting: The permittee shall comply with the reporting requirements of 40 CFR 60.48c, and in Section B110.

H. 40 CFR 63, Subpart DDDDD (Units H1, H3 through H6) (all heaters are now subject to DDDDD)

Requirement: The units are subject to 40 CFR 63, Subpart DDDDD and the permittee shall comply with the applicable requirements of 40 CFR 63, Subpart A and Subpart DDDDD. Heaters H1, H3, H4, and H5 shall meet the emission standards at 63.7540(a)(10). Heater H6 shall meet the emission standards specified in 63.7500(e) and 63.7540(a)(12).

Monitoring: The permittee shall comply with all applicable monitoring and testing requirements of 40 CFR 63, Subpart DDDDD, including 63.7540(a)(10) for Units H1, H3, H4,

and H5; and 63.7500(e), 63.7540(a)(11), and 63.7540(a)(12) for Units H2, H3, and H6.

Recordkeeping: The permittee shall comply with the applicable recordkeeping requirements of 40 CFR 63.7555 and 63.7560.

Reporting: The permittee shall comply with the applicable notification and reporting requirements of 40 CFR 63.7545 and 63.7550, and in Section B110.

A205 Turbines – Not Required

A206 Flares

A. Good Combustion Practices (GCP) (Units FL1, FL2, and FL3) (add FL3 to condition and revisions based on submittals)

Requirement: To demonstrate compliance with the allowable emission limits in Table 107.A, the BACT requirements in Table 105, and the 98% destruction rate efficiency (DRE) for VOCs and CH4, the permittee shall comply with the following GCPs.

- (1) The permittee shall conduct operational inspections, semi-annually (two times per 12-months), to determine that the flares (FL1, FL2, and FL3) are operating properly.
- (2) For Flare FL3: The permittee shall submit, in searchable electronic format, the manufacturer's FL1, FL2, and FL23FL3 specifications, and an inspection protocol, and make and mode of FL3 to the Permit Section Manager within 3 months of PSD5217-M1 permit issuance. facility startup. At a minimum, the protocol shall include and identify the methods for monitoring pilot flame temperature, proper residence time within the combustion area, and proper air mixing.
- (3) For Flares FL1 and FL2: The permittee shall submit the make and model number (e.g. Zeeco UFS, UFC, UFX, etc.) to the Permit Program Manager within 3 months of PSD5217-M1 permit issuance. Also, the permittee shall submit, in searchable electronic format, the manufacturer's specifications and inspection protocol for Flares FL1 and FL2 within 3 months of PSD5217-M1 permit issuance. At a minimum, the protocol shall include and identify the methods for monitoring pilot flame temperature, proper residence time within the combustion area, and proper air mixing.
- (7) For Flares FL1, FL2, and FL3: Within 3 months after all flares have started operating or after PSD5217-M1 permit issuance, whichever is later, the permittee shall provide a table that lists each flare unit number and each section of the DCP Midstream Preventative Maintenance and Inspections Guidelines and Practices manual that applies to each flare. Only the sections that affect regulated air emissions shall be listed.
- (8) All submittal requirements in this condition shall be to the attention of the Permit Program Manager.
- 2) The permittee shall implement the proposed site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.
- (3) FL1, FL2, and FL32 shall comply with no visible emissions requirement at 40 CFR 60.18(c)(1), shall be operated with a flame present at all times in accordance with 40 CFR 60.18(c)(2), and shall comply with the heat content and maximum tip velocity specifications at

Commented [CH21]: Do we need more or revised conditions - ask Robert

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Commented [CH22]: With the FL1 and FL2 manual, we can't tell the type of flare without the model number (e.g. UFS Steam assisted, UFC center steam assisted). The procedures that apply depend on the type of flare. That is the reason for asking for the make and model number.

Commented [CH23]: Based on the documents for the flares submitted 5-21-15, different makes require different maintenance.

Commented [CH24]: Specifications for FL1 and FL2 and their monitoring equipment were submitted, but we cannot find in those documents an inspection protocol that includes method for monitoring pilot flame temperature, proper residence time within the combustion zone, and proper air mixing. Those were the GCP parameters cited in the application.

Commented [CH25]: It was not clear what parts, if any, of DCP's Preventive Maintenance and Inspection Guidelines and Practices manual apply to flares.

40 CFR 60.18(c)(3).

(4) To ensure on-going good combustion practice of the units, the permittee shall update the inspection and maintenance protocol as needed based on operational experience with the units.

Monitoring: Inspections and visible emissions monitoring shall be conducted when FL1, FL2 and/or FL3 are operating.

- (1) The permittee shall conduct the semi-annual inspections according to the inspection protocol.
- (2) Semi-annually, the permittee shall determine the exit velocity in accordance with 40 CFR 60.18(f)(4) and flows as measured in Condition A107, and determine the net heating value according to Condition A107.C.
- (3) Semi-annually, the permittee shall verify that there are no visible emissions from Units FL1, FL2 and FL3 for more than 5 minutes in 2 consecutive hours using EPA Reference Method 22 as stated at 40 CFR 60.18(f)(1). The observation period shall be 2 hours.

Recordkeeping: The permittee shall keep the following records:

- (1) The permittee shall maintain a copy of the manufacturer's flare specifications and the inspection protocol.
- (2) The permittee shall maintain a table that lists each flare unit number and each section from the most current versions of the DCP Midstream Preventative Maintenance and Inspections Guidelines and Practices manual that applies to each flare.
- (3) The dates, parameters inspected, the results of the inspections, and any repairs or adjustments needed as a result of the inspections.
- (4) The exit velocity, the net heating value, and the parameters and calculations used to determine these values.
- (5) The EPA Method 22 results.
- (6) The permittee shall also maintain records in accordance with Section B109.

Reporting: The permittee shall report according to Section B110.

B. Facility Blowdown System: Visible Emissions and 20.2.37.205.E NMAC (Units FL1, FL2, and FL3)

Requirement: The permittee shall not operate a blowdown system without disposing of the gases in a manner which will minimize hydrocarbon emissions to the atmosphere and the flares shall be smokeless flares. (20.2.37.205.E NMAC)

Monitoring: The permittee shall demonstrate compliance with the monitoring required in Condition A206.A.

Recordkeeping: The permittee shall maintain a records in accordance with Condition A206.A **Reporting:** The permittee shall report in accordance with Section B110.

C. Emergency Operation (Unit FL3) (new condition)

Requirement: The flare, unit FL3, shall only have emissions resulting from the pilot flame, unless otherwise approved by this permit. The permittee shall install a flow meter to continuously measure the flow of gas to flare.

Monitoring: The permittee shall monitor the flow of gas to flare, to include a log describing the type of flaring event, time, and quantity.

Commented [CH26]: Do we need a different condition for FL3 since it is for emergencies only? We have a version that works for blowdown flares that doesn't require they send gas to the flare just to check visibility.

Recordkeeping: The permittee shall maintain records of the monitoring activities demonstrating that the flaring event is the result of an emergency and not from a scheduled maintenance event.

Reporting: The permittee shall report in accordance with Section B110.

A207 Sulfur Recovery Unit - Not Required

A208 Amine Unit

A. Operating and Control Requirements (Unit Amine)

Requirement: The permittee shall meet the following requirements tTo comply with the allowable emission limits in Table 106.A₇ and with the BACT requirements in Table 105.÷

- (1) All amine unit equipment components (including the amine contactor, flash tank(s), amine tanks, amine pumping system, and amine still) shall be inspected semi-annually for proper function and operation.
- (2) Flash tank emissions shall be recovered and sent to the inlet stream at all times.
- (3) Emissions from the amine still overhead vents shall be routed at all times to the acid gas injection wells (AGI) and controlled with the AGI except for authorized emissions in Section A107, when off gases may be routed to FL2 during routine or predictable startup, shutdown, and/or maintenance.
- _(AGI wells, Units AGII and/or AGI2, Condition A210.A), except during periods of AGI maintenance when emissions shall be routed to the acid gas flare (Unit FL2, Condition A107.A);
- (4) At no time shall the amine unit emissions from the still vent or flash tank be vented directly to the atmosphere.

Monitoring: Semi-annually, the permittee shall inspect all amine unit equipment components for proper operation and function and to ensure that the flash tank emissions, and amine unit still overhead vents are routed at all times to their control devices.

Recordkeeping: The permittee shall maintain a record of the semi-annual inspections, any deviations from the requirements of this condition, and any necessary repairs.

Reporting: The permittee shall report in accordance with Section B110.

B. Limit on Total Amine Overhead Flow (Unit Amine) (new condition. Only one AGI is now planned for installation. Each AGI has a max capacity of 8 mmscf/d)

Requirement: To ensure sufficient control of the amine unit overheads by the Acid Gas Injection well (AGI), the permittee shall limit sour gas processing to no more than 8 MMscf/d.

This requirement is based on the maximum inlet capacity per AGI.

Monitoring:

The permittee shall monitor the maximum daily volumetric flow rates of off gases from the Amine Unit in scf/d or MMscf/d.

Commented [CH27]: Cember - See also new amine unit monitoring protocol.

The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Recordkeeping: The permittee shall keep records of the daily volumetric flow rates of amine unit off gases and of the flow meter calibrations.

Reporting: The permittee shall report in accordance with Section B110.

C. Acid Gas Injection Well Operation (Units Amine and AGI1 and AGI2) (condition relocated from Section A210. Only 1 AGI is now planned for installation at this time. Each AGI has a maximum capacity of 8 mmscf/d)

Requirement: The permittee shall demonstrate compliance with the allowable emission limits in Table 106.A and with the BACT requirements in Table 105 for Amine unit by meeting the following Acid Gas Injection well (AGI) requirements. 100% capture of CO2e emissions (AGI as BACT for the Amine Unit). For SSM AGI events, the resulting acid gases shall be routed to FL2.

- (1) The permittee shall operate <u>up-toat least one-two</u> Class II <u>acid gas</u> injection wells (AGI) <u>that holds a valid</u> (permit_ted through_from the New Mexico Oil and Conservation Division (NMOCD)).
- (2) At all times, the Amine unit off gases shall be routed to and controlled with the These well(s) (AGI1 and AGI2) shall receive acid gases exiting from the Amine Unit (Condition A208.A) except as allowed for authorized emissions in by Section A107, when off gases are routed to FL2 during routine or predictable startup, shutdown, and/or maintenance.
- (3) The permittee shall meet the following requirements:
- (a) If two AGI wells are operating, Oonly one of the AGI wells (either AGI1 or AGI2) shall be taken offline at any time for maintenance. During such times, acid gases intended for the well out of service shall be routed to the acid gas flare (FL2) and in accordance with the allowable emission limits in Table 107.A.
- (b) Total volumetric flow of acid gases exiting the Amine Unit, shall at all times be equal to the sum of acid gas volumetric flows_entering AGII, AGI2being injected_, and/or_routed to flare FL2:

Amine Unit exit flow = \underline{total} \underline{AGII} $\underline{injection}$ flow \underline{rate} + $\underline{AGI2}$ \underline{inlet} flow + FL2 \underline{inlet} flow

- (4) (e) The permittee shall monitor and compare the AGI compressor discharge pressure and the AGI well head pressures. The pressure at the compressor(s) discharge minus the pressure at the well heads shall be a positive number.
- (5) (d)—If at any time the NMOCD requests a radio-tracer study of the permittee's AGI wells, the permittee shall notify the Department of such request made by NMOCD.

Monitoring:

(1) The permittee shall monitor and compare the differential pressure between the AGI compressor discharge pressure and the AGI well head pressures and shall The permittee shall

Commented [KO28]: ACID GAS PROCESSING IS DECREASING FROM 16 TO 8 MMSCF/D.
THEREFORE, THE REUQIREMENT TO INSTALL 2 AGI WELLS, EACH WITH A CAPACITY OF 8, WE REMOVED FROM THIS CONDITION. THE PERMIT LIMITS ACID GAS PROCESSING THROUGH THE AMINE UNITS TO ENSURE EMISSIONS ARE CONTROLLED WITH 1 ACI WELL.

monitor when any AGI well goes offline, monitor the duration of time the well(s) is/are offline, and when an offline well comes back online.

- (2) The permittee shall continuously monitor with a flowmeter the flow of acid gases:
 - (a) from the Amine Unit.
 - (b) injected into each of the wells AGI1 and AGI2 the AGI, and
 - (c) sent to the acid gas flare (FL2).
- (3) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Recordkeeping: The permittee shall maintain <u>these</u> records of the monitoring required by this condition. Records shall at a minimum include the following:

- (1) Date and time a well goes offline
- (2) Duration of time a well is offline
- (3) Date and time a well comes back online
- (4) Volume<u>tric flow of of amine off-gases acid gases: 1)</u> from the Amine Unit, 2) into each well (AGII and AGI2) the AGI(s), and 3) to the acid gas flare (FL2).
- (5) Records of the flow meter calibrations
- (6) Records of the wellhead and discharge differential pressure

Reporting:

- (1) The permittee shall report to the Permit Section Program Manager the wellhead and discharge pressures (psig) within 30 days of initial startup of each acid gas injection well.
- (2) The permittee shall report to the Department when NMOCD requests a radio-tracer study of the permittee's AGI wells.
- (3) The permittee shall report in accordance with Condition B110.
 - D. 40 CFR 60, Subpart OOOO (Unit Amine) (new condition. For units that process equal to or more than 2 LT/D, but is reinjected.)

Requirement: The unit(s) is/are subject to 40 CFR 60, Subpart OOOO, if the source is constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365, and the acid gas produced is completely reinjected into oil-or-gas-bearing geologic strata or otherwise not released to the atmosphere. The permittee shall comply with the applicable requirements in Subpart A, but is not subject to §§60.5405 through 60.5407, 60.5410(g), 60.5415(g), and 60.5423 of subpart OOOO.

Monitoring: The permittee shall meet all applicable monitoring and/or testing requirements in 40 CFR 60, Subpart OOOO.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5420 to demonstrate exemption from standards, test methods, and monitoring in 60.5405 through 60.5407, 60.5410(g), and 60.5415(g), and 60.5423 (if applicable).

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5420 and in Section B110.

Commented [CH29]: These requirements apply when AGI processes more equal to or more than 2 LT/D and the gas is injected.

A209 Fugitive Equipment Leak Standards

A. Facility-wide Operations (Unit FUG) and Leak Standards (equipment leak standards for all applicable process unit equipment) FUG includes named units Amine, Dehy, FL1, FL2, FL3, L1, TK-1, TK-2, TK-C, TK-G, TK-H, and VCD1 (Unit FL3 was added)

Requirement: The permittee shall comply with the allowable emission limits in Table 106.A, BACT control requirements in Table 105, and Condition A106.D. To demonstrate compliance with these requirements, the permittee shall implement a leak detection and repair (LDAR) program. An LDAR program that meets all of the requirements of 40 CFR 60, Subpart OOOO shall be deemed in compliance with this condition.

Unit FUG is subject to 40 CFR 60, Subparts A and OOOO according to 40 CFR 60.5365 and the permittee shall comply with the notification requirements in Subpart A and the applicable specific requirements of Subpart OOOO, including standards in 60.5400.

Monitoring: The permittee shall inspect equipment in wet gas and VOC service, in accordance with the requirements at 40 CFR 60, Subpart OOOO.

- (1) The permittee shall place a visible tag on all components that have a liquid leak or a vapor leak greater than 500 ppm VOCs until those components are repaired.
- (2) The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5410 and 60.5415.

Recordkeeping: The permittee shall maintain records of all leaks and shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5420, and according to Section B109.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5420, and in Section B110.

Previous A210.A condition for AGI was moved to A208.C

A210 Vapor Combustion Device (Unit VCD1) (Was section A211)

A. Good Combustion Practices (GCP) (Unit VCD1)

Requirement: To demonstrate compliance with the allowable emission limits in Table 106.A,

the BACT limits in Table 106.B, and the 98% destruction rate efficiency (DRE) for VOCs and CH4, the permittee shall comply with the following GCPs.

- (1) The permittee shall conduct operational inspections, semi-annually (two times per 12-months), to determine that the vapor combustion device (VCD1) is operating properly.
- (2) The permittee shall submit the manufacturer's VCD1 specifications and an inspection protocol in searchable electronic format, to the Permit Section Manager within 3 months of facility startuPSD5217-M1 permit issuance.p. At a minimum, the permittee shall identify the sections of the protocol shall include that include the methods for inspecting and adjusting proper residence time within the combustion chamber, minimum combustion temperature, and proper air distribution.
- (3) Within 3 months after PSD5217-M1 permit issuance the permittee shall provide a table that lists each section of the DCP Midstream Preventative Maintenance and Inspections Guidelines and Practices manual that applies to the VCD. Only the sections that affect regulated air emissions shall be listed.
- (4) All submittal requirements in this condition shall be to the attention of the Permit Program Manager.
- (5) The permittee shall implement the proposed site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.
- (6) To ensure on-going good combustion practice of the units, the permittee shall update the approved inspection and maintenance protocol as needed based on operational experience with the unit.

Monitoring: Inspections shall be conducted when the VCD1 is operating. The permittee shall conduct the semi-annual inspections according to the Department approved inspection protocol.

Recordkeeping: The permittee shall keep the following records:

- (1) A copy of the manufacturer's VCD1 specifications and an inspection protocol as approved by the Department. The permittee shall also maintain a copy of the approval from the Department.
- (2) The permittee shall maintain a table that lists each section from the most current version of the DCP Midstream Preventative Maintenance and Inspections Guidelines and Practices manual that applies to the VDC.
- (3) The dates, parameters inspected, the results of the inspections, and any repairs or adjustments needed as a result of the inspections.
- (4) The permittee shall also maintain records in accordance with Section B109.

Reporting: The permittee shall report according to Section B110.

B. Initial Compliance Test NOx, CO, and VOC (Unit VCD1) (new condition. Emission rates can be measured from an enclosed combustion device)

Requirement: To demonstrate compliance with the allowable NOx, CO and VOC emission limits in Table 106.A and the BACT limits in Table 106.B, the permittee shall conduct an initial compliance test as follows.

(1) EPA Reference Method Tests for NOx and CO, listed in Condition B111.B, shall be

Commented [CH30]: Thank you for the submittal. But we need an electronic version. We were able to find some, but not all protocols for minimum requirements. They may be there, but we couldn't identify all.

Commented [CH31]: It was not clear what parts, if any, of DCP's Preventive Maintenance and Inspection Guidelines and Practices manual apply to flares.

conducted on the vapor combustor.

- (2) VOC emission concentrations shall be determined in accordance with EPA Reference Method 18, 320 or the current version of ASTM D6348.
- (3) Tests shall be completed in accordance with Section B111 of this permit.

Monitoring: The permittee shall monitor all parameters necessary to meet the recordkeeping requirements of this condition.

Recordkeeping:

- (1) Records for NOx, CO and VOC emission rates shall include at a minimum the following information measured during the test run, the lb/hr emission rate, the fuel heat value (Btu/scf), the fuel consumption (scf/hr), the lb per fuel heat rate (lb/MMBtu), and all parameters used to calculate emission rates.
- (2) The permittee shall use the most current gas analysis to determine the fuel heat value (Btu/scf) and measure the actual fuel flow rate to the vapor combustor during the test.
- (3) If stack gas flow rate is determined utilizing EPA Reference Methods 1 through 4, records shall include the stack gas temperature, the level of excess air, and the percent moisture.
- (4) All calculations used to determine emission rates shall be included with the test records.
- (5) The permittee shall maintain records in accordance with the applicable Sections in B109, B110, and B111.

Reporting:

- (1) The test report shall summarize the records required by this condition.
- (2) The permittee shall report in accordance with the applicable Sections in B109, B110, and B111.
 - Verification of Emission Rates (Unit VCD1) (removed requirement for extended analysis and replaced with instructions to measure total sulfur. The AQB meant "total sulfur" not extended analysis which speciates more hydrocarbons than is needed)

Requirement: To demonstrate compliance with the allowable emission limits in Table 106.A and the BACT limits in Table 106.B, the permittee shall comply with the following monitoring and recordkeeping.

Monitoring:

- (1) A gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage) capable of recording hourly flow volumes, shall be installed in the VCD1 gas line to measure and record the total standard cubic feet (scf) of gas sent to the VCD1 during each hour and each month.
- (2) The permittee shall determine the VOC content, the CH4 content, the CO2 content, and the heating value (Btu/scf) of the gas sent to the VCD1 for combustion at least once annually with a gas analysis.
- (3) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Recordkeeping:

- (1) The following records shall be kept:
 - annual extended-gas analysis including total sulfur
 - hourly and monthly flowmeter and flow totalizer measurements of gas sent to the VCD1
- (2) Each month, the permittee shall record and summarize in a table format the following.
 - percent VOC, CH4, and CO2 content
 - gas heating value (Btu/scf)
 - the maximum hourly gas flow rate (scf/hr) that occurred during the month
 - the hourly gas flow rate (scf/hr) for any hours that exceeded any pph or lb/MMBtu emission limit during the month
 - the total month's scf of gas sent to the VCD1
 - during the first 12-months of monitoring, the cumulative total of gas sent to the VCD1 (scf/yr)
 - after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to the VCD1 (scf/yr)
- (3) Records of flowmeter, totalizer, and inline monitor certifications, <u>annual</u> calibrations, breakdowns, reasons for the breakdown, and corrective actions taken shall be maintained.
- (4) Each month to demonstrate compliance with emission limits, the permittee shall calculate and summarize the maximum pph and lb/MMBtu emission rate, any pph and/or lb/MMBtu emission rate exceeding the permitted limits, and the ton per year emission rates of NOx, CO, VOC, and CO2e using the following information:
 - the VOC, CH4, and CO2 content, and the gas heating value (MMBtu/scf) from the most recent gas analysis
 - the emission factors used to calculate NOx and CO
 - the maximum hourly gas flow rate (scf/hr)
 - the hourly gas flow rate (scf/hr) for any hours that exceeded any emission limit during the month
 - during the first 12 months of monitoring, the cumulative total of gas sent to the VCD1
 - after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to the VCD1 (scf/yr)

Reporting: The permittee shall report in accordance with Section B110.

A211 Wet Surface Air Cooler (Unit CT-1)

A. Good Maintenance and Operational Practices (Unit CT-1) (new condition for new unit)

Requirement: To demonstrate compliance with the allowable emission limits in Table 106.A and the BACT requirement in Table 105, the permittee shall meet the following requirements.

(1) The wet surface air cooler Unit CT-1 shall be equipped with a drift eliminator and

designed, operated, and maintained according to manufacturer's specifications, or equivalent, so that the drift rate is 0.005% or less of the water circulation rate.

- (2) The water in the air cooler shall not exceed a total dissolved solids (TDS) of 3500 ppmw.
- (3) The circulation rate the air cooler's water pumps shall not exceed 240 gallons per minute.

Monitoring: The permittee shall monitor the following parameters.

- (1) At least once per year, inspect to verify that the drift eliminator is in place and in good repair.
- (2) At least once per month, measure the TDS of air cooler water in ppmw.

Recordkeeping:

- (1) The permittee shall maintain manufacturer records specifying the drift rate and maximum water flow rate.
- (2) The permittee shall keep records of the drift eliminator inspections and TDS measurements.
- (3) The permittee shall also maintain records in accordance with Section B109.

Reporting: The permittee shall report according to Section B110.